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ABSTRACT

Documents added to the national Educational Resources Information Center (ERIC) collection by the Clearinghouse on Educational Media and Technology are listed in this collection of three newsletters from 1971. Reports of the activities of the Clearinghouse are featured. Included is a special video issue with articles on utilization of the video tape in high school and cassette playback units. (DS)

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THE ERIC AT STANFORD NEWSLETTER

1971

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NOW AVAILABLE FEB '71

ERIC at Stanford

The Newsletter
from the Clearinghouse
on Educational Media and Technology

In this issue of *Now Available*, documents are listed which deal with

**Simulation and Gaming
Computers**

Television and Radio

Film

Audiovisual General

Systems Approach

Programed Instruction

Other Visual Materials

Simulation and Gaming

Serious Games, Clark C. Abt, 1970. Available from The Viking Press, 625 Madison Ave., New York, N.Y. 10022 (\$5.95), 176p.

The ways in which games can be used to instruct, inform, and educate are explored. The various chapters discuss the use of games for improving education, for guidance in occupational choice, and for solving problems, as well as discussing the analysis of games as a thinking tool, the methods of designing games, and the evaluation of the cost effectiveness of games.

A Computer-Based Feedback Model for Simulation Exercises Involving School Administrators. Final Report, Gerald R. Boardman, University of Wisconsin, Madison, Dept. of Educational Administration, October 1, 1969, EDRS Price MF \$1.25, HC \$14.70, 292p, ED 039 779.

A study was devised to develop a computer-based model for maximizing both the feedback of an administrative simulation exercise and the analysis of results.

Instructional Simulation Systems: An Annotated Bibliography, Paul A. Twelker, Ed., Oregon State System of Higher Education, Monmouth, Ore., Teaching Research Div., 1969. Available from Continuing Education Publications, Waldo Hall 100, Corvallis, Ore. 97331 (\$6.75), 286p.

This bibliography lists the latest available references on instructional simulation systems and includes references not only to simulation but to other pertinent topics (such as instructional systems design, computer-assisted instruction, and programed instruction).

Computers

Research and Development in the Computer and Information Sciences. Volume I, Information Acquisition, Sensing, and Input: A Selective Literature Review, Mary Elizabeth Stevens, National Bureau of Standards, Washington, D.C., Center for Computer Sciences and Technology, March 1970, EDRS Price MF 75c, HC available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (C 13.44:113/Vol. 1, \$1.50), 169p, ED 039 891.

An Analysis of the Experience and Effects of Computer Assisted Scheduling in Selected Institutions of Higher Education, Mario Joseph Tomei, Temple Univ., Philadelphia, Pa., Coll. of Education, abstract of a thesis, June 1969, EDRS Price MF 25c, HC \$1.75, 33p, ED 040 562.

The study presents descriptive data about each system and also seeks to identify those institutions operating superior systems.

The Psychology of the Computer— Part of the Privacy Problem

... The psychology of the computer, or at least of the computer programmer, becomes an important part of the overall privacy problem. There is, for example, a tendency to treat computerized data more casually than the same information in another form. An example of this is a manager who turned over the entire employee records of an employee to an outside authority, whereas he would not have had the information been retained in a simple file rather than as data within the computer system.

There also is a tendency to gather data irrespective of one's ability to process it. Computer intended forms are generally longer and more comprehensive, often containing unnecessary information, than forms which are not for computerization. An example again, lies in the driver's license form for the state of California which asks such questions as marital status, to include whether widowed or divorced, and make and license of car. California, the state of California, is selling its lists to private industry.

Another tendency is the very human tendency to use any resource, simply for the sake of using it. Just as the man with a gun is more prone to use it, so too is the man with the information cannon.

The most notable aspect of the present industry discussion centering upon privacy is the very tone of the discussive voices themselves. Whereas, as recently as two years ago the industry looked upon privacy as an image problem and worried that it might suffer as a result of bad publicity, the question is now regarded as a more personal one.

The data processor has come to understand that he too lives in the real world of data processing. That just as he retains files, there are files retained on him. This interest is, in truth, self-serving, but it is also a healthy awakening to exactly how real the problem is and how soon it must be solved.—from an article in the August-September 1970 *Data Systems News*, presented here to remind you that "computers and privacy" is just one more educational area of concern to the clearinghouse at Stanford and to the whole ERIC system.

An Evaluation of the 1968-1969 New York City Computer Assisted Instruction Project in Elementary Arithmetic, Max Weiner and others, City Univ. of New York, N.Y., Div. of Teacher Education, paper presented at the Annual Meeting of the American Educational Research Association, Minneapolis, Minn., March 5-8, 1970, EDRS Price MF 25c, HC \$1.10, 20p, ED 040 576.

Computers in Education: Their Use and Cost, 1970. Available from American Data Processing, Inc., 19830 Mack Ave., Detroit, Mich. 48236, 97p.

Part one of this document consists of the findings and recommendations of the President's Science Advisory Committee. Part two provides information about estimating the costs of purchasing, installing, implementing, and operating a media system.

Index to Computer Assisted Instruction, Helen A. Lekan, Ed., University of Wisconsin, Milwaukee, Instructional Media Lab., Feb. 1970. Available from Sterling Institute, Suite 3750 Prudential Tower, Boston, Mass. 02199 (\$19.50), 295p.

3 Computers for Education: Report of a Working Party into the Potential Applications and Development of Computer Based

Now Available
Number 18

The Clearinghouse is part of the Institute for Communication Research
Stanford University, Stanford, Calif. 94305

(More Computers)

Learning Systems, Joseph Black, Ed., National Council for Educational Technology, 1969. Available from Councils and Education Press Ltd., 10 Queen Anne Street, London W.1, England (\$1.26), 43p.

Advantages, possible drawbacks, and economic implications of computer based learning systems are presented in this state-of-the-art paper for Great Britain.

ERIC Online Retrieval System. Use of the DIALOG Online Information Retrieval System with ERIC Research in Education Files. Final Report, Roger K. Summit, Lockheed Aircraft Corp., Palo Alto, Calif., April 1970, EDRS Price MF 50c, HC \$3.00, 58p, ED 040 592.

Television and Radio

Discriminating Characteristics of Families Watching Sesame Street. Early Developmental Adversity Program: Phase III, EDAP Technical Note 15.1, Thomas E. Jordan, March 1970, EDRS Price MF 25c, HC 35c, 5p, ED 039 943.

Results of this survey indicate that viewers already belong to the group most prepared for school, while nonviewers are those who most need the possibly beneficial effects of "Sesame Street."

The Effectiveness of Teaching Selected Reading Skills to Children Two Through Four Years of Age by Television, Barbara J. Dunn, Paper presented at the Annual Meeting of the American Educational Research Association, Minneapolis, Minn., March 2-6, 1970, EDRS Price MF 25c, HC 60c, 10p, ED 040 027.

Testing showed that the children could be effectively taught selected reading skills.

Utilization of Instructional Television for Teachers and Administrators, James H. Keener and Van Ftergiotis, Capitol Region Education Council, West Hartford, Conn., 1970. Available from METRO Educational Services Center, 200 Bloomfield Avenue, West Hartford, Conn. 06117 (\$2.00), 84p.

The suggestions offered in this book are divided into sections based on the amount of equipment available to the teacher. Suggestions for administrators deal with in-service training, student orientation, observation programs, program evaluation, testing, and interviewing. Copyright and the selection, purchase and maintenance of equipment are discussed.

Television and Educational Reform in El Salvador. Complete Report on the First Year of Research, Emile G. McNany and

HEW to Spend Full \$11 Million Appropriated for Broadcasting

The full \$11 million appropriated by Congress for the Educational Broadcasting Facilities Program will be spent in fiscal 1971 by the Department of Health, Education and Welfare. The decision to spend the full \$11 million appropriation was made known in a telegram to selected congressmen from HEW, which said:

"This response is to your recent letter inquiring about the release of funds for educational broadcasting facilities. We are pleased to be able to tell you that the decision has been made to spend the full \$11 million appropriation. There are still several processing steps to be completed, but we expect to fund applications up to the \$11 million in the very near future."

Chalmers Marquis, executive vice president of the National Association of Educational Broadcasters, said, "That the full \$11 million will be spent during this fiscal year is due to the fact that public television and radio station managers presented their needs and goals so well to their representatives in the Congress, who, in turn, represented public broadcasting to the President and the Secretary of HEW."

"We are gratified by the HEW decision. The \$11 million will enable the undertaking of a significant number of the 140 projects already proposed to HEW by public broadcasters for fiscal 1971."

Documents Processed And/Or Cited By the Clearinghouse

Most documents listed here can be ordered, in microfiche or hardcopy form, from the ERIC Document Reproduction Service. If a document is not available from EDRS, information is given on where it can be obtained, or at least where it was published.

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others, Stanford Univ., Calif., Inst. for Communication Research, July 1970, EDRS Price MF 75c, HC \$9.75, 193p, ED 040 596.

Television Guidelines for Early Childhood Education, Rose Mukerji, National Instructional Television Center, Bloomington, Ind., 1969. Available from National Instructional Television, Box A, Bloomington, Ind. 47401 (\$2.00), 58p.

This document attempts to identify, to explain, and to demonstrate desirable content and to present a production plan for television programs designed for young children.

National and International Systems of Broadcasting: Their History, Operation and Control, Walter B. Emery, 1969. Available from Michigan State University Press, East Lansing, Mich. 48823 (\$12.50), 752p.

Television in Urban Education: Its Application to Major Educational Problems in Sixteen Cities, Charles W. Benton and others, Fund for Media Research, Chicago, Ill., 1969. Available from Frederick A. Praeger Publishers, 111 Fourth Avenue, New York, N.Y. 10003 (\$15.00), 141p.

For this report on the status and needs of schools as served by television in 16 major U.S. cities, a survey and investigation were conducted. Conclusions and recommendations are also included.

The Sesame Street Learning Kit, 1970. Available from Little, Brown and Co., 34 Beacon Street, Boston, Mass. 02106 (\$19.95), 350p.

The kit contains five books, a record, and posters based on the materials used in the "Sesame Street" television series. A parent's guide is also included.

Film

A Happening? Creative Film-Making Resource Unit, Mary E. Daley, 1969, EDRS Price MF 25c, HC \$2.45, 47p, ED 041 006.

To change the classroom trend of promoting competition among children and repressing their feelings, this unit on film making focuses on various creative activities from writing film reviews to actually making a film.

(More Film)

Young Filmmakers, Rodger Larson and Ellen Meade, 1969. Available from E. P. Dutton & Co., 201 Park Ave. South, New York, N.Y. 10003 (\$5.95), 190p.

Ways to make movies and descriptions of the various tasks involved in such cinematic activities are detailed.

Film Study in Higher Education, David C. Stewart, Ed., American Council on Education, Washington, D.C., report of a conference sponsored by Dartmouth College in association with the American Council on Education, 1966. Available from the American Council on Education, 1785 Massachusetts Ave., N.W., Washington, D.C. 20036 (\$2.75), 174p.

This resource book on the place of film study today is designed to assist in the planning of college courses in the history, criticism, and appreciation of motion pictures.

Audiovisual General

Audiovisual Market Place 1970. A Multimedia Guide, February 20, 1970. Available from R. R. Bowker Co., 1180 Avenue of the Americas, New York, N.Y. 10036 (\$12.25), 226p.

Both hardware manufacturers and software producers/distributors are arranged alphabetically by firm name and in indexes classified by product line. Also provided are lists of national audiovisual associations and allied groups, a calendar of conventions, a list of educational radio and television stations, a reference list, and a list of serial publications and review services.

National Conference on the Use of Audiovisuals in Medical Education, Proceedings (University of Alabama Medical Center, Birmingham, August 6-8, 1969), EDRS Price MF 75c, HC \$8.55, 169p, ED 041 128.

Thirty-nine medical educators attended a two-day conference to resolve some of the disparity which exists between the knowledge and utilization of audiovisual aids and to define the role of learning resource centers.

A Study of Color in Instructional Materials and Its Effects Upon Learning. Final Report, Don L. Tolliver, Purdue Univ., Lafayette, Ind., Audio Visual Center, March 1970, EDRS Price MF 50c, HC \$4.90, 96p, ED 041 346.

Results indicated that higher scores were achieved with high codable colored stimuli rather than with low, with position items rather than with color items, and with simple object stimuli rather than geometric shape stimuli. Differences appear to exist between colors as they interact in instructional materials.

Systems Approach

A Method of Measuring the Costs and Benefits of Applied Research, John W. Sprague, Dept. of the Interior, Washington, D.C., Bureau of Mines, 1969. Available from the Superintendent of Government Documents, U.S. Government Printing Office, Washington, D.C., 20402 (TN23.U71 no. 8414 622.06173, 50c), 42p.

The Bureau of Mines studies the application of the concepts

Balpay, Buflo and Polut Ready; Other Simulations to Follow

A newsletter and the first of some computer-simulation materials for high school use have been announced by the Huntington. Two project at Polytechnic Institute of Brooklyn.

The first programs, which will be written in BASIC and distributed free, are BALPAY (the mechanisms involved in balance of payments with foreign countries), BUFLO (management of buffalo herds) and POLUT (water pollution).

The project is funded by the National Science Foundation, and requests for information—and the newsletter—should be addressed to Lud Braun, Polytechnic Institute of Brooklyn, 333 Jay St., Brooklyn, N.Y. 11201. It is perhaps only fair to mention that the newsletter is published, according to the masthead, “whenever the mood is upon us.”

Information Sources Session at AECT Coordinated by ERIC

ERIC at Stanford is coordinating a session on “Information Sources in Educational Technology” at the 1971 convention of the Association for Educational Communications and Technology. The organization meets in Philadelphia this year, and the information sources session is scheduled for March 25, from 2:45 to 5 p.m.

Included among those taking part are Tom Risner of the National Information Center for Educational Media (NICEM), Ron Randall of Westinghouse Learning Corp., Leslie Greenberg or Glenn McMurry of the National Audiovisual Center, Jim Prevel or Don Mikes of Educational Information Services, Jim Fellows of the National Association of Educational Broadcasters, Millard Fisher of Fisher Publishing Co., and W. T. Brandhorst of the ERIC Processing and Reference Facility.

and methods of cost-benefit analysis to the problem of ranking alternative applied research projects. Procedures for measuring the different classes of project costs and benefits, both private and public, are outlined, and cost-benefit calculations are presented, based on the criteria of probability of success and internal rate of return.

Cost-Effectiveness Analysis for Educational Planning, Margaret B. Carpenter and Sue A. Haggart, Rand Corp., Santa Monica, Calif., March 1970. Available from The Rand Corporation, 1700 Main Street, Santa Monica, Calif. 90401, 15p.

In order to help the educational planner with his problems in achieving a more effective use of educational resources, this paper proposes a method of analysis which is called resource effectiveness.

Programed Instruction

Effects of Unit Size and Content Upon Programmed Instruction and Prediction of Learner Success. Final Report, John M. Flynn, Nova Univ., Ft. Lauderdale, Fla., May 1969, EDRS Price MF 75c, HC \$9.35, 185p, ED 039 782.

The results of the study suggest that curriculum material developers should consider abandonment of high response frequency programed instruction and seek a better approximation to the laboratory operant model.

The Interactive Effect of Responses per Frame, Response Mode, and Response Confirmation on Intraframe S-R Association Strength. Final Report, Charles Karis and others, Northeastern Univ., Boston, Mass., EDRS Price MF 50c, HC \$4.35, 85p, ED 040 591.

Findings showed that overt response was superior to covert response and that reading response was definitely a function of the reproduction accuracy required on criterion items. Also, the variation of number of responses required per frame produced a significant effect in favor of multiple responses.

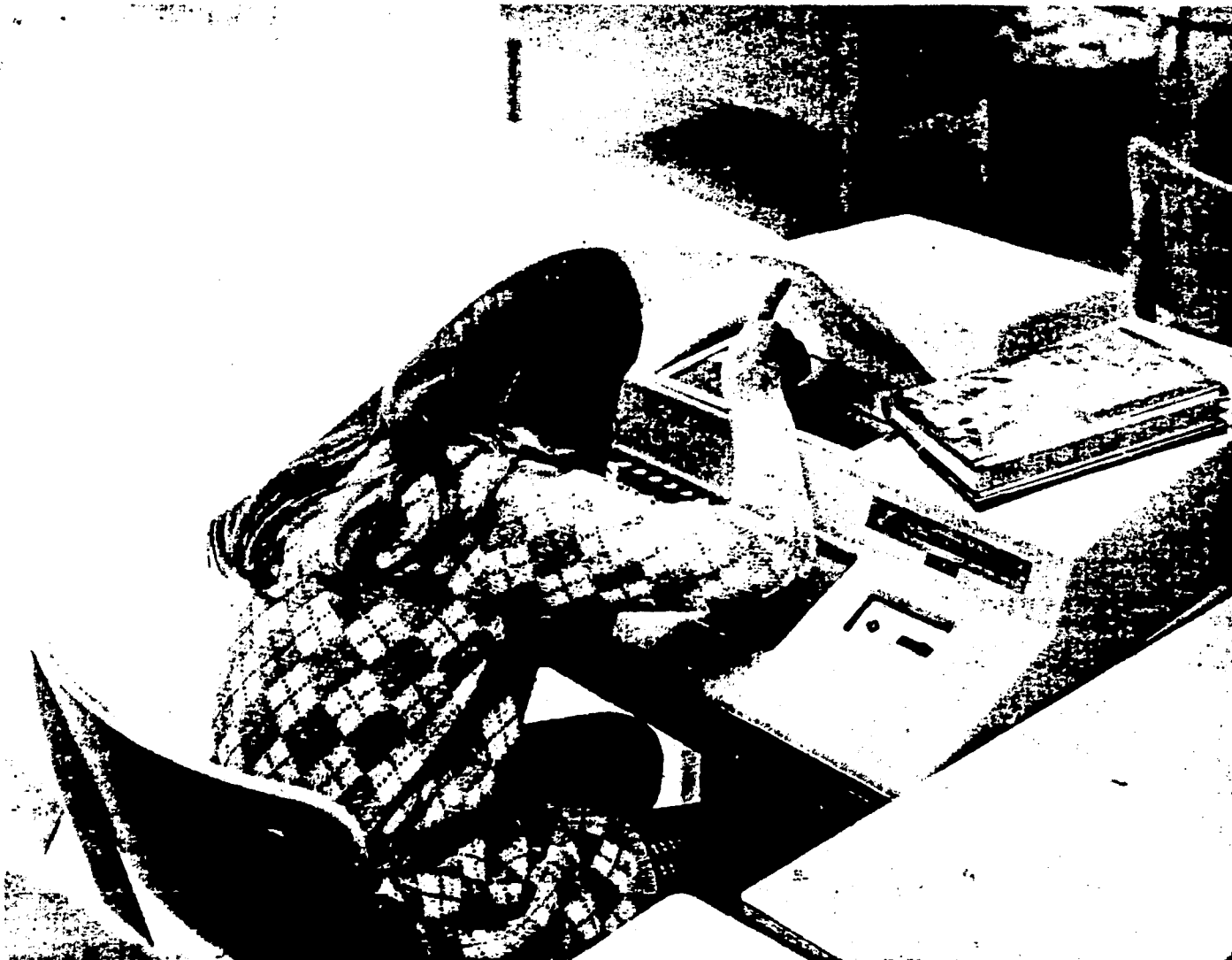
The Relationship of Anxiety, Response Mode, and Content Difficulty to Achievement in Programed Instruction. Final Report, Sigmund Tobias and Theodore Abramson, City Univ. of New York, N.Y., City College, February 15, 1970, EDRS Price MF 25c, HC \$2.10, 40p, ED 040 605.

A strong positive relationship between facilitating anxiety and achievement on technical material was found. Facilitating anxiety also interacted with stress and response mode for technical material. Debilitating anxiety failed to interact with any variable for technical material and only with stress for familiar material.

Other Visual Materials

Adapting Varied Visual Illustrations for Optimum Teaching and Learning, Francis M. Dwyer, Jr., Pennsylvania State Univ., University Park, Div. of Instructional Services, paper presented at the Annual Meeting of Medical Illustrators, Washington, D.C., September 1969, EDRS Price MF 25c, HC 60c, 10p, ED 041 479.

The results of these studies form the basis for a number of 5 generalizations which may be helpful in guiding the production and use of visual illustrations.



—a New York Daily News photo

The Computer in Education—and Privacy (see Comments on Page 1)

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ERIC at Stanford

The Newsletter
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Payment in check or money order must accompany all orders under \$10. Hardcopy now is more readable because it is full size, rather than 80% of original size.

MIMI, MIDI, MICROTEACHING

Need a guide to assist you with the microteaching minicourse model as an inservice education program to improve specific behavioral skills of teachers?

Microteaching and the Minicourse. A Manual for Planning and Implementation, Suffolk County Regional Center, Patchogue, N.Y. (1968), EDRS Price Microfiche 65c, Hardcopy \$3.29, 45 pages, ED 045 552.

AUDIOVISUAL GENERAL

A unified media program seemed to produce no better audiovisual climate than separate library and audiovisual programs:

The Relationship of Teacher Perceptions of a School's Audiovisual Climate to the Organizational Structure of its Media Program, Paul David Miller, Univ. of Wisconsin, Madison, School of Education, paper presented at the Annual Meeting of the Association for Educational Communication and Technology, Detroit, Mich., April 27-May 1, 1970. Available from University Microfilms, 300 N. Zeeb Rd., Ann Arbor, Mich. 48106 (order no. 70-3632) Microfilm \$4, Hardcopy \$10, 123 pages.

The media units and materials presented here were evaluated by Black graduate students and representatives of the Black community:

Media for Teaching Afro-American Studies. IRCD Bulletin, Volume 6, Numbers 1 and 2, Adelaide Jablonsky, Columbia Univ., New York, N.Y., ERIC Clearinghouse on the Urban Disadvantaged, Sept. 1970, EDRS Price Microfiche 65c, Hardcopy \$3.29, 23 pages, ED 042 856.

The sound motion picture and the still picture with sound proved superior media in reaching four classes of learning objectives: Identification, Comparison,

Fiche format to change, probably, but not soon

The possibility that the format of ERIC microfiche will change has caused some confusion in the ranks of our friends.

That possibility is good indeed, and the confusion is understandable, but the change is being considered with the long-range welfare of friends and users in mind.

Late this summer the Federal Council for Science and Technology voted to replace the present 20X magnification fiche with 24X fiche, which would make it possible to present the images of 98 ordinary size pages on one fiche. The present fiche can present a maximum of 72 pages.

Not only ERIC, but other large federal purveyors of fiche are involved: The National Technical Information Service, the Atomic Energy Commission, the Defense Documentation Center and the National Aeronautics and Space Administration. As things now stand, all are expected to change over to the more compact format, but at times convenient to themselves and their own users.

"There will be no quick change to the new format by ERIC," according to Harvey Marron, Director of the U.S. Office of Education's Division of Information Resources. "We feel the proposed format offers advantages, and won't inconvenience anyone. This is because the present 20X microreaders will also work satisfactorily with 24X fiche, when they come along."

First indications were that they would not come along, in the ERIC system, for at least two years. The present contract between the Office of Education and the subcontractor handling ERIC fiche production has that long to run, and probably will not be reopened for format changing.

News of clearinghouse staff changes

William Paisley, former director of the Clearinghouse on Media and Technology, now is in charge of a new U.S. Office of Education research project based in the Institute for Communication Research. That project is housed just next door to the clearinghouse, so Dr. Paisley's guiding advice will still be available to ERIC.

Now the only, lonely, director of the clearinghouse is Don H. Coombs.

Other staff changes included the return of Judith Yarborough, who will be chief abstractor and will be involved in other aspects of document processing.

Classification, and Generalization. As tested at the University of Southern California, there was little evidence that a hierarchical pattern exists between higher order and lower order tasks for the learning of cognitive information.

Effectiveness of Different Combinations of Visual and Verbal Presentation Modes in Teaching Different Kinds of Learning Tasks. Final Report, William H. Allen and others, Sept. 1970, EDRS Price Microfiche 65c, Hardcopy \$6.58, 139 pages, ED 044 759.

7

Cataloging procedures for charts, records, filmloops,

filmstrips, flash cards, games, kits, maps and globes, slides, audio and video tapes, and transparencies are outlined in this 31-page report:

Design for Cataloging Non-Book Materials: Adaptable to Computer Use, Genesee Valley School Development Association, Rochester, N.Y., 1969, EDRS Price Microfiche 65c, Hardcopy \$3.29, ED 045 153.

SIMULATION AND GAMING

The Valleybrook Elementary School-Lakemont High School Simulation Game was developed to teach teachers about typical problems of schools with racially and ethnically heterogeneous student bodies. All three relevant 1970 publications are by Frederick P. Venditti of the University of Tennessee's College of Education:

Guidebook for Discussion Leaders for Solving Multi-Ethnic Problems: A Simulation Game for Elementary and High School Teachers, EDRS Price Microfiche 65c, Hardcopy \$6.58, 109 pages, ED 044 463.

Participant's Handbook for Solving Multi-Ethnic Problems: A Simulation Game for Elementary and High School Teachers. Participant's Workbook..., EDRS Price Microfiche 65c, Hardcopy \$6.58, 106 pages, ED 044 464.

Program Director's Manual for Solving Multi-Ethnic Problems: A Simulation Game for Elementary and High School Teachers, EDRS Price Microfiche 65c, Hardcopy \$6.58, 137 pages, ED 044 465.

MEDIA CENTERS

Media centers are the subject, and a total of 114 references have been annotated and outlined to allow easy access to relevant published material:

So This is How You Run a Media Center! Organizing, Administering, and Developing a School Instructional Media Center; An Annotated Bibliography, Shelby Elaine Strand, North Dakota Univ., Grand Forks, Dec. 1970, EDRS Price Microfiche 65c, Hardcopy \$3.29, 93 pages, ED 045 112.

AND/OR COMPUTERS

Because of the overwhelming amount of data which is insufficiently processed by conventional counseling and guidance systems, some of the ways the computer can be used to provide needed support are discussed:

Readings in Computer Based Guidance: The Bartlesville System, papers delivered at the American Educational Research Association Convention, Minneapolis, Minn., March 2-6, 1970, and the American Personnel and Guidance Association Convention, New Orleans, La., March 1970. EDRS Price Microfiche 65c, Hardcopy \$3.29, 75 pages, ED 042 223.

Interested in the experience of teachers using computers in high school instruction? This three-volume manual summarizes the experience of the Huntington Computer Project in biology, chemistry, earth sciences, mathematics, physics, and social studies:

The Uses of Computers in High Schools. A Teacher's Manual Prepared by the Teachers of the Huntington Computer Project. Preliminary Version, Ludwig Braun and Marian Visich, Jr., Brooklyn Polytechnic Institute, N.Y., Aug. 1969. Available from the Polytechnic Institute of Brooklyn, Graduate Center, Farmingdale, N.Y. 11735. Vol. I, 325 pages, Vol. II 214 pages, Vol. III, 291 pages.

Predominantly Mexican-American students given

computer-assisted instruction had greater confidence in the computer than in the teacher. They saw the machine as fair and trusted its evaluations and task assignments:

The Computer as a Socializing Agent: Some Socioaffective Outcomes of CAI, Robert D. Hess and others, Stanford Center for Research and Development in Teaching, Stanford Univ., Stanford, Calif., Oct. 1970, EDRS Price Microfiche 65c, Hardcopy \$6.58, 141 pages, ED 044 942.

1130, 1130, 1130, 1130!

Academic and popular writings on the causes, effects, and responses to urban disorders are cited in:

Bibliography on the Urban Crisis: The Behavioral, Psychological, and Social Aspects of the Urban Crisis, Jon K. Meyer, Center for Studies of Child and Family Mental Health, National Institute of Mental Health, Chevy Chase, Md., 1969. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. (order no. 1969 0-355-009) \$3.75, 452 pages.

The free-learner principle poses environments rich in academic, artistic, and athletic stimuli as alternatives to traditional public education, and this survey presents observations of visitors to such classrooms in the San Francisco Bay Area:

The Free Learner: A Survey of Experiments in

Showing slides: odds favor the house, 7 to 1

Everybody knows how to "spot" slides, or at least everybody knows he is supposed to know, so this "how to do it" paragraph is presented only as an example of good straightforward communication.

From the program for the 52nd annual meeting of the Pacific Division of the American Association for the Advancement of Science at San Diego last June:

"Slides should be arranged and numbered in the order in which they are to be shown and 'spotted' on the front, bottom, left-hand corner. When turned upside down for placing in a projector, the spot on the front of the slide will be in the upper right hand corner. Such standard spotting will facilitate proper projection, and help to avoid all of the seven wrong ways a 2 x 2-inch slide can be projected."

Great Speckled Bird rises, in small way

A lot of libraries have the New York Times on microfilm, and some have a good many other newspapers available that way. Now libraries can expand their archival coverage of the American scene by adding Bell & Howell's "Underground Press Collection," which preserves for all time the 1970 offerings of the *Berkeley Barb*, *East Village Other*, *L.A. Free Press* and *Great Speckled Bird*.

A special supplement includes underground papers dedicated to such minorities as Women's Lib, Black Panthers, American Indians, military enlisted men and high school students. Prices and other specifics are available from Bell & Howell at Old Mansfield Rd., Wooster, Ohio 44691.

What will happen when an elderly library patron accidentally gets a reel of the *Berkeley Barb* instead of the *New York Times* may be of considerable interest, since the two publications differ considerably. Especially the want ads.

One possible solution would be to keep the underground press microfilm under the counter, and issue it only to people younger than thirty, who can be trusted.

Education, Constance Woulf, Mar. 1970, EDRS Price Microfiche 65c, Hardcopy \$3.29, 34 pages, ED 044 048.

Once the idea of designing a multi-media program has been accepted, planning what media to use, learning what facilities and personnel are available, and deciding how to finance and maintain the program are important considerations. These case studies cover multimedia programs in shorthand, typing, mathematics, biology and English:

Case Studies in Multi-Media Instruction, Richard Banister, ERIC Clearinghouse for Junior College Information, UCLA, Oct. 1970, EDRS Price Microfiche 65c, Hardcopy \$3.29, 61 pages, ED 044 098.

The 24 papers cited in this survey all deal with computer animation of motion pictures and are grouped into three categories: general discussions, animation languages, and specific applications:

Computer Animation: A Literature Survey, J. Meltzer, New York Univ., Oct. 1969. Available from the National Technical Information Service, Springfield, Va. 22151 (order no. AD-696 989) Microfiche 95c, Hardcopy \$3, 27 pages.

Data were collected in interviews with major book publishers, their subsidiaries, and producers of materials other than books to uncover what constitutes research and development for the industry. Information also was sought on respondents' perceptions of their companies' roles in the educational process:

Research and Development in the Educational Materials Industries, Institute for Educational Development, New York, N.Y., 1969, EDRS Price Microfiche 65c, Hardcopy \$3.29, 85 pages, ED 043 232.

PROGRAMMED INSTRUCTION

In this study microfiche was used as a format for presenting programmed material:

Programmed Instruction with Microfiche: Introduction to the Slide Rule, L. W. Wachtel, Naval Dental School, Bethesda, Md., July 1970. Available from the National Technical Information Service, Springfield, Va. 22151 (order no. AD-710 374) Microfiche 95c, Hardcopy \$3, 12 pages.

TV TV TV TV TV TV TV

What reasonably can be expected today from the use of television for instruction?

Television in Instruction: What is Possible, National Association of Educational Broadcasters, Washington, D.C., 1970. Available from the NAEB, 1346 Connecticut Avenue, Washington, D.C. 20036, 24 pages.

This ITV production system uses no studio crew and no control room—the switching and camera-handling are done by the performer himself:

The Self-Directed System: A Simplified Production Method for Instructional Television, Rudy Bretz, Rand Corp., Santa Monica, Calif., Dec. 1969. Available from the National Technical Information Service, Springfield, Va. 22151 (order no. AD-699 580) Microfiche 95c, Hardcopy \$3, 23 pages.

Actions taken by the FCC in 1970 are reviewed and discussed in:

FCC, CATV, ETV, and ITFS, Louis Schwartz and

The Director's Corner:

Routine operations around the clearinghouse often receive little attention until things go wrong. Things have been going very right with our routine operations, thanks to the people involved, and this is probably a good place to express appreciation.

It is also an appropriate place to give the reader some idea of the scope of "routine operations" here. During the last three months, the clearinghouse handled 1707 requests for information, and processed 356 documents and journal articles for submission to the national ERIC system. Of the 356, 154 were documents for listing in *Research in Education*, and 202 were journal articles for listing in *Current Index to Journals in Education*.

The two figures represent forms of input and output—1707 requests for information and 356 items indexed for inclusion in the ERIC national publications and computer tapes. If you weren't involved with either category, but should have been, please get in touch—

Although no longer able to perform customized searches of the ERIC files for individuals, we can supply printed explanations of the ERIC system and guides to use in performing searches yourself. And if you're engaged in any kind of educational project which others would benefit from knowing about, please send us copies of resulting reports, so they can be considered for inclusion in the national collection.

Don H. Coombs

CCTV seen as answer to school segregation

The power of television, or maybe just the power of an idea whose time came a hundred years ago, is being demonstrated in Dallas.

District Judge William M. Taylor Jr. in August solved the city's school integration problems, in a manner acceptable at least to the school board, by ordering that white children be shown black children, and vice versa, on closed circuit television.

Judge Taylor spoke enthusiastically about his television solution. "Dallas must take the lead in the use of this great tool," he said. "I am convinced it is constitutional as a desegregation tool."

Parents of 21 Black and Chicano children were less enthusiastic; they filed notice of appeal with the U.S. Fifth Circuit Court of Appeals in New Orleans.

If the desegregation problem can be solved with television, there is reason to think that poverty and hunger also can be easily handled, through scheduled showings of money and food.

Robert A. Woods, speech given at the 46th Annual Conference of the National Association of Educational Broadcasters, Washington, D.C., Nov. 8-11, 1970, EDRS Price Microfiche 65c, Hardcopy \$3.29, 23 pages, ED 044 939.

MEDIA INSTRUCTION

An in-depth view of doctoral education in instructional technology as it exists today, along with a set of guidelines for improving it in the future:

An Analysis of the Doctoral Level Preparation Programs in the Field of Instructional Technology at Selected Institutions, Glenn Gardner Snow, paper presented at the Annual Meeting of the Association for Educational Communications and Technology, Detroit, Mich., April 27-May 1, 1970. EDRS Price Microfiche 65c, Hardcopy \$6.58, 160 pages, ED 044 029.

Broadcast Satellites; Their Potential Use for Educational Purposes, and Their Relationship to International Understanding and Cooperation. Occasional Paper Number Three, John Hanessian, Jr., and Joseph B. Margolin, George Washington Univ., Washington, D.C., July 1969, paper presented at Hearings before the House of Representatives Committee on Foreign Affairs; Subcommittee on National Security Policy and Scientific Developments, EDRS Price Microfiche 65c, Hardcopy \$3.29, 22 pages, ED 044 042.

AUDIOVISUAL MATERIALS

Where exposure time is limited, as in group presentations, simple line drawings are preferable. Where time is determined by the student (for example, in programed instruction), more detailed presentations have greater learning value:

Exploratory Studies in the Effectiveness of Visual Illustrations, Francis M. Dwyer, Jr., Div. of Instructional Services, Pennsylvania State Univ., University Park, Dec. 1969, EDRS Price Microfiche 65c, Hardcopy \$3.29, 26 pages, ED 043 218.

The laws of the 50 states which bear upon the selection and purchase of educational materials are analyzed, and materials selection procedures of 10 sample states are surveyed in detail in:

Selection of Educational Materials in the United States Public Schools, Institute for Educational Development, New York, N.Y., 1969, EDRS Price Microfiche 65c, Hardcopy \$13.16, 345 pages, ED 044 030.

Behavioral objectives, testing, flowcharts of student competencies, and diagrams to assist in selecting and prescribing instructional media are dealt with in:

Handbook of Procedures for the Design of Instruction, Leslie J. Briggs, American Institutes for Research, Pittsburgh, Pa., 1970. Available from AIR, 135 North Bellefield Ave., Pittsburgh, Pa. 15213 (\$5.50), 206

Papers on Black Radio, AV materials issued

Among papers recently published by the clearinghouse is one listing materials useful in teaching information science courses, and one documenting the present state of "black-oriented" radio.

The first paper, *Audiovisual Materials in Support of Information Science Curricula: An Annotated Listing with Subject Index*, is by Irving M. Klempner. It brought to our attention a problem spot in the English language: There's no good word to describe what the Klempner paper is.

It isn't a bibliography, because everyone knows biblio- refers to books. It may be a "mediagraphy," because some people already are using that term that way. But other people think a mediagraphy sounds too much like a mediocre something or other. In our situation, we proceeded to issue the very useful paper with a non-controversial title; we called it a listing.

The second paper, *Black Voices and Format Regulations: A Study in Black-Oriented Radio*, is by Anthony J. Meyer. It is careful to avoid suggesting that black-oriented radio stations give worse service than the others, but it does document the service actually given and contrasts that with the promises made when station ownership deals with the Federal Communication Commission.

The paper maintains that education and "information flow" are as much the responsibility of the commercial stations as of the "educational" stations. Ways and means of convincing station ownership to improve service are spelled out for local community groups.

While the first printings last, complimentary copies of both papers are available direct from the clearinghouse.

pages.

This unannotated bibliography identifies documents which discuss ways of determining the appropriateness of given instructional materials:

The Evaluation of Instructional Materials. Bibliography, V. J. Naegle, Mid-Atlantic Region Special Education Instructional Materials Centers, Washington, D.C., Sept. 1970, EDRS Price Microfiche 65c, Hardcopy \$3.29, 5 pages, ED 044 447.

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THIRD CLASS



ERIC at Stanford

The Newsletter
from the Clearinghouse
on Educational Media and Technology

SPECIAL ISSUE

This issue of the ERIC newsletter has been taken over by the Media Access Division of Portola Institute, an alternate television outlet, generating information, access, and software in 1/2" video technology and compatible systems.

Media Access associates are also guest editors and frequent contributors to Radical Software, a journal of video experimentation. Radical Software has appeared four times since the summer of 1970, and includes valuable information on cable television, video cassettes, computers, biofeedback, and details experiments in education, community organizing, art, psychology, and more. It also contains an ever lengthening list of names and addresses of video experimenters in the U.S. and Canada (plus a few from Europe and Japan).*

Most of the material in this special newsletter comes out of the experience of Media Access, with some excerpts from past issues of Radical Software. However, you will still find some regular ERIC documents listed on the last page.

Next issue the newsletter reverts back to its normal form and function, but ERIC hopes to devote more space in the future to other groups and publications which merit your attention.

Shelley Surpin, Allen Rucker & Richard Kletter
Media Access
Portola Institute
1115 Merrill Street
Menlo Park, California



*Radical Software, published by
Raindance Corporation
8 East 12th Street
New York, New York

A Note on "Instructional" Television

With the advent of portable video technology, television is no longer the sole property of mandarin professionals or merely a pipeline for feeding prepackaged knowledge into young memories. Video now takes the shape of a highly flexible learning tool, capable of generating its own indigenous modes of schooling (and deschooling), and worthy of wily experimentation.

An individual student, once he's learned the simple mechanics of video, can use this tool for a multitude of information needs and interests far beyond the narrow context of polished production. To teach a student (or teach yourself) to conceive of video only as a formal production device is roughly equivalent to teaching him only to write in essay form. To condition him to consume instructional television without expanding that mode to include the raw data of his own environment is even worse—it's a kind of perceptual imperialism.

The Alternate TV Movement

from the preface to Radical Software I, Summer 1970

As problem solvers, we are a nation of hardware freaks. Some are into seizing property or destroying it. Others believe in protecting property at any cost—including life—or at least guarding against its spontaneous use. Meanwhile, unseen systems shape our lives.

Power is no longer measured in land, labor, or capital, but by access to information and the means to disseminate it. As long as the most powerful tools (not weapons) are in the hands of those who would hoard them, no alternative cultural vision can succeed. Unless we design and implement alternate information structures which transcend and reconfigure the existing ones, other alternate systems and life-styles will be no more than products of the existing process . . .

Our species will survive neither by totally rejecting nor unconditionally embracing technology—but by humanizing it; by allowing people access to the informational tools they need to shape and reassert control over their lives. There is no reason to expect technology to be disproportionately bad or good relative to other realms of natural selection. The automobile, as a species, for example, was once a good thing. But it has now overrun its ecological niche and upset our balance or optimum living. Only by treating technology as ecology can we cure the split between ourselves and our extensions. We need to get good tools into good hands—not reject all tools because they have been misused to benefit only the few . . .

Fortunately, however, the trend of all technology is towards greater access through decreased size and cost. Low-cost, easy-to-use, portable videotape systems may seem like “Polaroid home movies” to the technical perfectionists who broadcast “situation” comedies and “talk” shows, but to those of us with as few preconceptions as possible they are the seeds of a responsive, useful communications system.

Videotape can be to television what writing is to language. And television, in turn, has subsumed written language as the globe’s dominant communications medium. Soon, accessible VTR systems and video cassettes (even before CATV opens up) will make alternate networks a reality . . .

The Tape Exchange

To foster the growth of specialized video networks which encourage personal interaction and feedback among tape-making groups, Raindance has established a model tape exchange/sales service. It works like this: on a voluntary basis, groups send a tape package to a central source in New York, and in turn receive an exchange tape of their choice, or a copy of the Video Access Catalog, a sampler of various tapes on hand. Groups who prefer to buy tapes instead may do so at minimal costs (\$15 a half-hour, if you send a raw tape).

If the tape is useful, the recipient can correspond with the original production source with a return tape, further requests, critical feedback, etc. Once a tape outlives its usefulness, it can be recycled and reused.

This is but one of many possible distribution experiments with new forms of television. As a model system, it’s an attempt to demonstrate that concomitant with the rise of commercial outlets like CATV and the cassette market, individual groups can build their own self-defined video information networks, on a mutual support basis. It’s a way of insuring that a diversity of information needs, rather than commercial needs, are given the highest priority.

The following is a sample list of videotapes of educational bearing now circulating through the Raindance exchange:

THE CLINTON PROJECT (60 min): a group of junior high school kids making up their own kind of broadcast-type television. RAINDANCE

COMPOSITE: UNIVERSITY LIFE (60 min): introduction to video on campus, produced by students at STATE UNIV. OF NEW YORK, BUFFALO

JUVENILE JUSTICE (30 min): a high school-produced perspective on the juvenile legal system. MEDIA ACCESS

POVERTY PROGRAM COMMUNITY ACTION (30 min): community action CATV programming produced by high school-aged group in New Jersey. CORPS TV

Guerrilla Television

by Michael Shumberg and Raindance Corp.

Holt, Rinehart, & Winston

160 pages / 8½"x11"

\$6.95/Hardbound; \$3.95/Paperback

Guerrilla Television is what author Michael Shumberg calls a “print-out” of the collective experiences of Raindance and other video groups in experimenting with new media forms, together with a general scheme for decentralizing television. A multitude of suggestions for using video and designing video systems in the contexts of community, education, and self-exploration are prefaced by a lengthy analysis of media systems as ecological forms. The prime focus is toward developing a sense of “media ecology,” i.e. understanding the psychic consequences of established information forms like broadcast television and print-based learning in the context of personal and social evolution—and perceiving the potential advantages of newer forms, such as the feedback capabilities of 1/2” video:

“Healthy systems share the following characteristics:

- 1. They support a high variety of forms, or diversity rather than uniformity;*
- 2. they are complex, not simple;*
- 3. they minimize redundancy and are thus negentropic;*
- 4. they are symbiotic rather than competitive;*
- 5. they trend towards decentralization and heterogeneity; and*
- 6. they are stable as a result of the above.*

Under those ecological rules, broadcast television becomes heast television.”

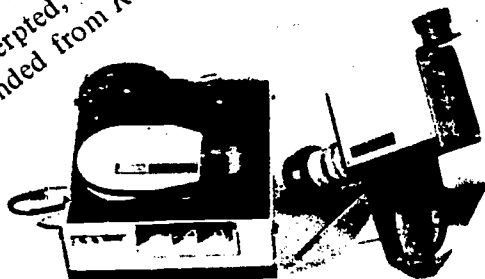
* * *

“Portable video means that television studios are obsolete; that the behavior they elicit is revealed as ultra-styled. The true “talk” show becomes a conversation with a man in his natural environment, not a series of synchronous monologues in rows where each new “guest” displaces the previous one by one slot.

Portable video means that you, your friends, your environment, your life are as much potential information as an infinity of Six O’Clock Newses . . . ”

MANUAL

(excerpted, condensed, and expanded from *Radical Software III*)



The Tool

The central tool of the burgeoning alternate television movement is the portable battery-operated videotape recorder, known as the portapak. The portapak embodies technological evolution towards decentralization: Within twenty minutes, anyone who can lift twenty pounds can learn to use it and can start processing and disseminating his own information. The bias of instant playback and a reusable recording material, the ease of operation and the reduced size and cost puncture the myth of technology as something of necessity controlled by an elite. In the new age of a-v literacy, it is the first general instrument for writing and thus the first step toward two-way, open-ended information flow. The taking up of the portapak by people around the country reflects an attitude towards technology (you can use it and demand that it serve you) and an attitude towards information (it's as blessed to transmit as to receive, and haven't we done a lot of just receiving lately?)

Tape

There are three standards of videotape and a fourth one coming: two-inch, one-inch, half-inch, and quarter-inch.

Two-inch or "high band" tape systems are indigenous to broadcasting and are exclusively low access systems. They are temperamental, complex to operate, stationary, and extremely expensive.

Generally, the wider the tape the more information it can hold. Two-inch systems, also called "quadraplex," lay the scanning signal perpendicular to the edge of the tape. All one and one-half inch systems incorporate helical scan which lays the signal at an angle to the tape edge.

Typically, clean editing was once an exclusive function of two-inch machines. One-inch was first used as a cheaper version as their size and price range (\$3000

to \$10,000) make them ideal for institutions with closed-circuit TV systems which imitate broadcast. Like two-inch, its editing capability is perfect.

Finally there are the battery-operated portables which use half-inch tape, although a quarter-inch recorder is promised in this country soon. All the portables may be interfaced with one-inch to provide perfectly edited one-inch masters. Color, for the time being, continues to be a feature of stationary decks, from half-inch on up.

The centerfold of *Radical Software III* gives a detailed description, complete with pictures, of the portables available. Sony is far and away the most widely used, as it is the easiest to get and to get serviced, and because it offers a totally self-contained system with record and playback through the camera. Fifteen hundred dollars will set you up with a camera and recorder unit, while another \$50 buys an RF adapter, allowing you to plug into any TV set. For \$50 more, you can buy a decent microphone to supplement the one built in to the camera, for recording in any noisy situation or putting in a separate audio track.

Edit

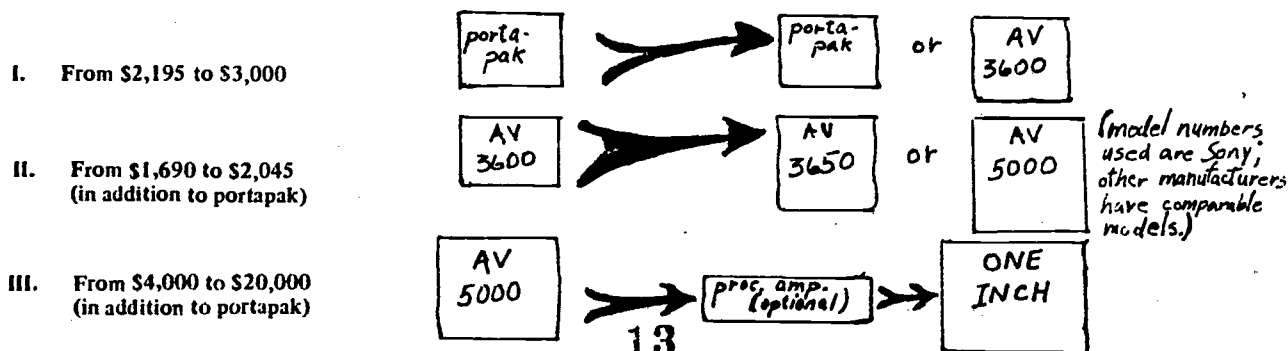
Electronic editing is done by putting your master (original) tape on one deck and recording it onto a second deck in a desired sequence. (The edited tape is thus an assembled copy, or second generation.) Simply sequential editing is called "assembly." Inserting material in an edit is called an "insert" edit.

Assembly editing is the most rudimentary form

and can be done whenever you have two tape decks. The results vary from clean cuts, if the system has an inherent editing function, to mild instability in systems where a dubbing (copying) function is made to serve as an editor.

It is also possible to edit tape manually by actually slicing the tape. However, in electronic editing you preserve the original master and are spared manual labor.

Generally, the more sophisticated your editing set-up, the more expensive and the less portable. There are basically three levels of editing:



High School

by P. Crowley and S. Surpin, directors
Scripps High School Video Workshop

In the middle and late sixties, videotape recorder manufacturers sold the nation's schools on the value of their product as a means of storing material from television for later classroom showings and a way for teachers to see themselves and thus improve their technique. The advent of portable recorders forced the realization that video could no longer be simply a teachers' aid but was potentially a tool for students to actively develop their own education by collecting, generating, and structuring information important to them. Unfortunately, the realities of this kind of exploration have meant a freedom of time and information content that most schools are unwilling to permit, and the bulk of video work and learning by high school age people has been outside the schools.

Working through a cable production workshop in Newburgh, New York; a community action project in New Jersey; a film workshop in Kentucky; a Model Cities program in Seattle, Washington; and many other places; kids are putting hands on the tools and producing tapes for cable television, community groups, their families, and themselves.

The Scripps High School Video Workshop, located in Redwood City, Calif., was in some ways unique, as we did not have either a production or training bias. We were simply offering to high school age people what we had found to be a particularly powerful communications tool, as a means for expression and experimentation. We hoped that some students would come to a better understanding of what it means to handle information, and that some would succeed in getting relevant and important messages out to their peers. In the interests of both this process and product, students had complete control over their projects from conception through dissemination, a fact sometimes hard for them to believe or handle. As a result, some projects never got off the ground, because students aren't used to working without the carrot or the stick. We helped students as much as they asked for it, answered questions, and gave advice, opinions and criticism, but the final decisions and directions were up to them.

Typically, kids came to us because their friends or teacher had passed the word around. We would usually spend about twenty minutes showing them how to use the camera and recorder and send them off to the Safeway or MacDonald's around the corner. They would come back excited and chattering, sometimes hours, sometimes only minutes later. After all, they had just made a star of some old coddler at the Salvation Army store who didn't like the length of their skirts or their hair. They would rewind the tape, turn on the monitor, and watch their creation play back over the TV screen from which Walter Cronkite, Laugh-In and Mod Squad usually vibrate. Some of the kids would get so excited they'd show up the next week with five friends and a six-page script, some would work for six months putting together a powerful document on juvenile justice, and some would never come back again.

The "juvenile justice" tape was the first full-scale, long term project of the workshop. The tape opens with an outside shot of juvenile hall, follows a fifteen-year-old, arrested for the third time, as he goes through the booking process, gets weighed, receives hall clothes and bedding, and is locked into a bare cell for twenty-four hours. Episodes are interspersed in which police officers talk about their manner of dealing with juvenile offenders, a public school teacher describes how he nabs kids in the classroom, and a fifteen-year-old, arrested twelve times, encounters her



psychiatrist father on their front lawn.

The eight kids in the project shot about six hours of tape, and the edited version lasts twenty-eight minutes. Most of the shooting was done in the last three weeks and editing took a day and a half, almost around the clock. While energy levels shifted up and down during the six month project, we maintained the posture that the Video Workshop was only a resource and we would not take over and direct if interest began to sag. The students made the appointments, provided the transportation, and accomplished the rather impressive feat of obtaining permission to shoot in juvenile hall. When the tape was finished they took it around to local high schools and groups of interested adults, catalyzing discussion on the issues involved.

In another instance, video helped a group of sophomores learn about governmental decision making. Their efforts centered around the proposed construction of a monstrous billboard in a decaying section of the students' neighborhood. Working this time through their school, they researched the issue, drew up questions and went with a portable video recorder to merchants in the area of the proposed billboard. They shot on Thursday, edited down the resulting tapes, and made a seven-minute presentation the following Tuesday at the city planning commission meeting. A decision was held off for one month. The students were really excited and lined up a series of appointments with the principals involved, during which their interviewing skills and general understanding of the issue improved markedly. Several meetings later the billboard was approved, to the great disappointment of the kids. But in the process, the students learned a lot about how government works and how to effect change.

Self-definition has been the result of a number of projects at the workshops. When students start making a tape to explain their activities to others, they end up by first asking themselves what they are and what is most important to them. This happened when students at different free and experimental schools decided to make tapes about their programs. Others have used video to share outside activities, like a socio-political theatre troupe and visits to an old age home, with students back at school. In the first case, the student also played back the tape for her troupe to get insight into their performance and audience reaction. In the second case, the students played back the tapes at the home for the old people to see themselves.

We found that a portapak was just gimmicky enough to create an excitement of its own, which in the majority of cases led beyond itself into some real learning. For many, it served as an excuse to enter situations they would otherwise have been too shy to enter. And for some, video was obviously a mode of communication far more natural and comfortable than pen and paper. And perhaps most important, we found that trust and freedom were always rewarded with responsibility and growth.



Most university-based video experiments extend outward into the community at large, in the form of community access CATV projects, indigenous community production, hardware and policy research. The Alternate Media Center, for example, a program connected to NYU, was recently created by a grant from the Markle Foundation to produce a variety of demonstration cable programs with community groups (Alternate Media Center, 144 Bleecker St., New York 10012). A listing of other such community-service campus operations can be found scattered throughout the FEEDBACK sections of Radical Software.

The notion of integrating electronic media forms into the structure of university learning per se has not really been developed beyond the crude stage of programming instructional data via closed-circuit systems. Described below are a couple of student-run video programs moving in a new direction.

Video at the University

VIDEOTEC

Loeb Student Center, Room 622
New York University
New York

Financed by the administration and supported by certain student councils, VIDEOTEC is open to every member of the NYU community.

EXPERIMENTAL VIDEO PLAYPEN: The Experimental Video Playpen is held every Monday night. It is open to everyone who has completed two instruction periods. It provides an opportunity to explore the various configurations of video feedback, playback time sequences (loops), etc. At the same time, participants are extending their familiarity with the equipment and with the group nature of the whole activity.

TUESDAY NIGHT SESSIONS: Each Tuesday night, the tapes shot during the previous week throughout the campus are viewed by those who have shot them with others who have expressed an interest in videotape. It is a critique session but it is also a chance for people to explain to each other in detail their experiences in shooting and to learn from each other solutions to the kinds of problems that come up. (from *Radical Software* No. 4)

Video Facility
Instructional Systems
Antioch College
Yellow Springs, Ohio

Funded largely by the university, the video program at Antioch serves both the general campus need for new information resources and the specialized needs of other curricula. Their work includes:

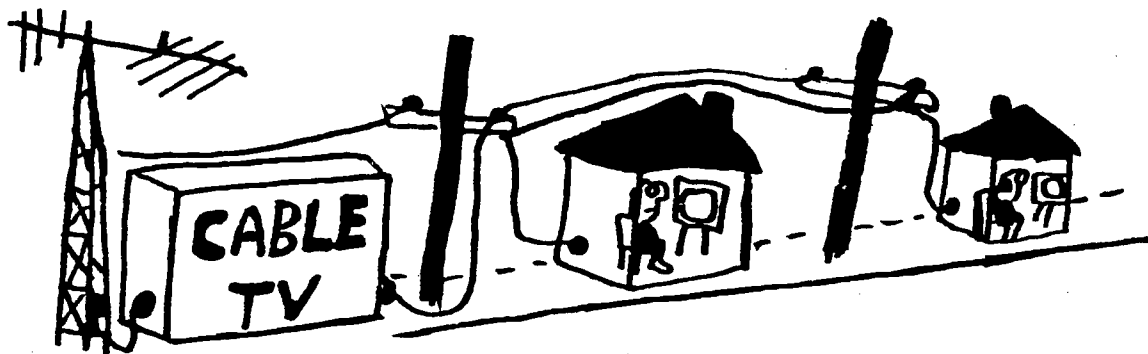
1. Courses in the theory and practice of new media, especially 1/2" video.
2. Documentation of campus events, speakers, etc. for open access playback.
3. Raw data recording, e.g. taping TV commercials off the air for advertising research by a sociology professor.
4. Structuring video events (like a tape-delay system) and group feedback exercises for particular classroom work on perception, group dynamics, etc.
5. Structuring campus viewing arenas, such as an outside "news" show every other day last summer, and a daily tape showing around the Six O'Clock News, planned for this fall.

Challenge for Change Newsletter
National Film Board of Canada
P.O. Box 6100
Montreal 101, Quebec

The Challenge for Change program (and its French-speaking counterpart, Societe Nouvelle) conducts forceful media access projects in film, video, and CATV with disenfranchised citizens groups in Canada. Showing respect for the integrity of the information source, these people help citizens use television and film to serve local needs. They permit citizens to create, review and if necessary reject any material involving them *before* it is aired.

The newsletter relies heavily on graphics, photos and direct transcripts to document attempts at community controlled television. It is highly informative and is in itself a vehicle for social change.





Cable television's much heralded proliferation will reconfigure our communications/information environment. Educators hope CATV can meet projected demands for more flexible educational delivery. They see labor costs spiralling and the "edifice complex" putting plant requirements out of reach, and so cable is viewed as a solution in time with its problem. But educators have always been easy prey for technology-intensive schemes.

Before lifelong learning, home terminals, teacher-less instruction, and computerized access to libraries turn your education nightmares into dreams, here are some hard thoughts to consider.

A major concern is to put into franchise agreements the notion of flexibility. Franchises are negotiated between revenue-starved municipalities and revenue-greedy cable companies and the potential of the system is often compromised for quick funds.

You should push for free 'hook ups' at schools, community centers, etc. and for a 'head end' or transmission/production center outside cable company space. A neighborhood center affords greater psychological and physical access than a commercial setting, thus providing more opportunity for local production and an improved forum for information dissemination.

In addition, provisions for upgrading the basic cable service should be written into each franchise agreement so that the system may adapt to changes in the technology. Half-inch video tape is almost always cablecastable, so question engineering excuses that would exclude its use.

Municipalities can include whatever provisions they choose and so no franchise should be awarded without sufficient planning, equality of access and use, and adequate compensation for the community as a whole.

CATV's gloomier side offers increased surveillance as

computers record each show you watch and each item of merchandise you select through the two-way system. In addition, cameras on every street monitored at the police station or cameras on a high school campus observing students (as in Lakewood, Florida) threaten to "modify our behavior."

Rosier possibilities include the active library in which students initiate materials for storage and use by their peers—an extension of the high school workshop described below.

Of substantial import is the promotion of public spaces where people can watch (and produce) television in an entirely new context. Watching television in the isolation of one's home may be attractive after a long hard day but it is merely one kind of experience. Group viewings are more conducive to interaction and attitude change and group viewers are usually more receptive to headier television fare.

The same principles apply to learning terminals in the home. We know that students learn from their peers and that teaching with peers is a marvelous way to learn. The atomized individual may master certain performance skills at home—but his conceptual and interpersonal abilities may not be comparably advanced. It depends on whether one views a child's head as a receptacle to be filled or a force to be guided and then released. My own choice is for a public space where video and TV can be enriching tools and invite participation. The time for the home terminal may yet come—but it certainly should not be hurried.

The special issue of *Nation*, "The Wired Nation," May 18, 1970, by Ralph Lee Smith, is still the best introduction to CATV available.

TV Cassettes

TV cassette or cartridge television means viewer controlled home playback systems similar to audio cassette systems. In a variety of configurations (including magnetic tape, laser hologram-vinyl tape, 'miniaturized' film, record discs, super eight film, etc.) these machines proffer significant changes for television, and the production and distribution of entertainment and information.

Cassettes are played by inserting them in a playback device which can be attached to any standard television set. Some systems permit off-the-air recording or, with a simple camera attachment, the creation of home movies for immediate viewing. Cartridge TV offers unlimited program selection, i.e. not limited by the economic necessity to reach a massive consumer audience. With little imagination, one can envision a vast, low-cost library of anything and everything, available at your whim. One manufacturer describes his system as a "complete home entertainment learning center for you."



But cartridge television will change more than home entertainment. The CBS design includes a full cartridge with over 180,000 frames of film. Single frame viewing provided by an excellent stop-action capability permits storage of a complete encyclopedia on a single cartridge. This kind of storage capacity could make cassettes the first home terminal for printed material—a development available to industry through computer time-sharing but thus far impracticable for home use. (Cable two-way computer hook-ups are not yet really with us.) In fact, Computer Teletel Corporation is planning the first "video periodical," geared for the computer market and distributed through one of the cassette systems.

(cassettes)

The cassette systems are divided essentially into playback only systems, generally with greater storage and stop-action capabilities, and record/playback systems which rely primarily on videotape and thus are limited in terms of storage. Libraries would probably benefit more from the playback only systems whereas schools would find the recording function a tremendous advantage. One concern is that the playback only systems cannot originate materials and so one must suffer the time delay and inconvenience required to transfer the original material to cartridge format. This is not a problem if one is concerned primarily with pre-recorded materials. It is obviously a problem if programs are being originated locally.

Initial market strategies will focus on institutional markets with training and other business applications providing the first testing grounds for the hardware. The

prospects for widespread use of decentralized television's newest tools likely await development of support systems. Rental and sales of cassettes will be done through record and book clubs, stores such as Sears and Macy's and local video centers. However the distribution schemes are not functioning as yet and it will be perhaps three years before programs become really available locally. In addition, many technical bugs and maintenance problems must be ironed out before the machines reach consumers and educators.

The situation is extremely complicated and designs change almost daily so it is difficult to paint an accurate still picture. Future spin-outs call for computer access to cassettes through the local cable system or local library accessing devices. The television of the future will be a wall screen and eventually perhaps a hologram but our most immediate promise is for a higher resolution screen to facilitate print viewing.

There are many questions left unanswered and therefore it is suggested that people wait as long as possible before making commitments to a particular system.

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Background information for schools interested in obtaining CATV facilities is presented in these papers:

Schools and Cable Television, National Education Association, Washington, D.C., Educational Technology Division, 1971, EDRS Price Microfiche 65c, ED 049 637. Available in regular printed form (381-11968) from NEA, Publications-Sales Section, 1201 Sixteenth St., N.W., Washington, D.C. 20036 (\$2.25), 66 pages.

This review of the use of ETV with adults in poverty groups covers program descriptions and recent research on the effectiveness of such programs, among other topics:

Television: A Viable Channel for Educating Adults in Culturally Different Poverty Groups?—A Literature Review, John A. Niemi and Darrell V. Anderson, Syracuse University, N.Y., ERIC Clearinghouse on Adult Education, April 1971, EDRS Price Microfiche 65c, Hardcopy \$3.29, 16 pages, ED 048 550.

More recent uses of television which allow face-to-face interaction may lead to new kinds of behavior by the parties involved, as experiments in this paper suggest:

Mediated Interaction Through Television: With Self and Others, James R. Taylor and others, presented at the International Communication Association Annual Conference, Phoenix, Ariz., April 1971, EDRS Price Microfiche 65c, Hardcopy \$3.29, 16 pages, ED 049 649.

The Open University in Great Britain employs a unique instructional system which includes a multimedia approach and a stress on the interdisciplinary nature of foundation courses. Radio, broadcast TV and part-time tutors all play a part.

The Teaching of Science to Students at a Distance, David G. Hawkridge, presented at Annual Conference of the American Association for the Advancement of Science, Chicago, Ill., December 1970. EDRS Price Microfiche 65c, Hardcopy \$3.29, 10 pages, ED 047 488.

Loss of individual freedom, changes in work and leisure patterns, and obsolescence in parenthood are some of the effects of technology on the individual which are pinpointed in this review publication:

Technology and the Individual, Irene Traviss, Harvard University, Cambridge, Mass., Program on Technology and Society, 1970. Available from Harvard University Press, 79 Garden St., Cambridge, Mass. 02138 (\$2.00), 62 pages.

Forty ninth graders who prepared short improvised dramas for production on videotape made significant improvement in IQ scores, reading achievement, composition ability and other skills:

The Effect of Pupil-Prepared Videotaped Dramas on the Language Development of Selected Rural Children, Richard Lewis Knudson, Boston University, School of Education, 1970. Available from University Microfilms, Post Office Box 1764, Ann Arbor, Michigan 48106 (order No. 70-22457, Microfilm \$4.00, Xerography \$10.00), 183 pages.

Teenagers as film makers and film making as self-expression are discussed in this manual. It gives advice on all phases of filmmaking, based on four years of experience.

A Guide for Film Teachers to Filmmaking by Teenagers, Rodger Larson, New York City Administration of Parks, Recreation and Cultural Affairs, N.Y., 1968. Available from Hannelore Hahn, Department of Cultural Affairs, 830 Fifth Avenue, New York, N.Y. 10009 (\$1.00), 47 pages.

This proposal lays out terms for the granting and regulation of cable television franchises for Chicago.

A Model Ordinance for Cable Television for the City of Chicago, Better Broadcasting Council, Chicago, Ill., December 1970. Available from the council at 53 West Jackson Boulevard, Chicago, Ill. 60604 (\$2.00), 15 pages.



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